ASC
Supplement to
Agenda Item No. 2(A)

MEMORANDUM

TO: Honorable Chairman Dennis C. Moss and Members, Board of County Commissioners

DATE: December 4, 2009

FROM: R. A. Cuevas, Jr. County Attorney

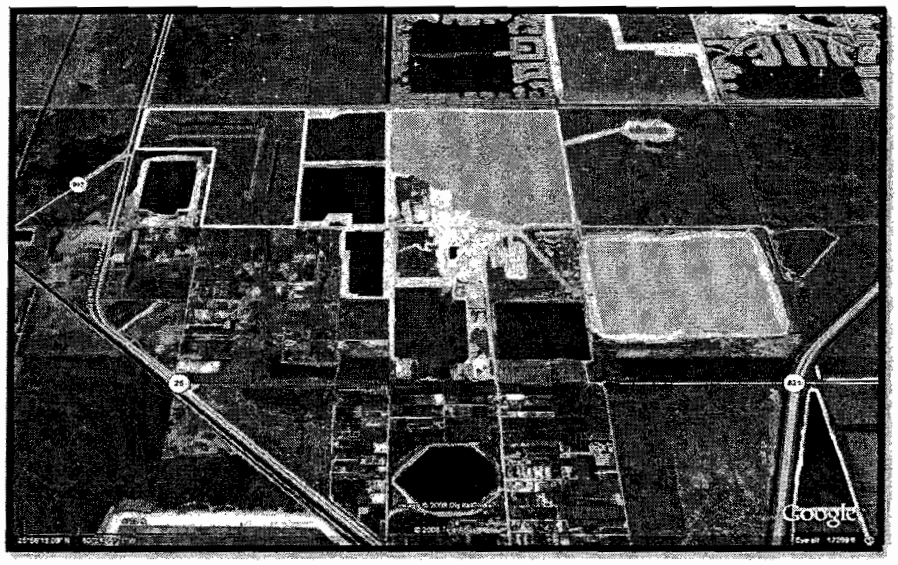
SUBJECT: Supplemental information to resolution relating to the former Opa-locka West Airport

The report entitled "Post-Mining Environmental and Recreational Opportunities at Opa-locka West Airport''reference in the item was inadvertently not attached. This supplement provides the report.

R. A. Cuevas, Jr.
County Attorney

RAC/cp

Post-mining Environmental and Recreational Opportunities at Opa-locka West Airport



Prepared for:

Miami-Dade Aviation Department

MIAMI INTERNATIONAL AIRPORT

By:

Lampl Herbert Consultants

LAMPL HERBERT

Final Report

June 16, 2009

1A

Table of Contents

Figures and Tables

Attachments

Introduction

Miami-Dade Aviation Department (MDAD) currently operates four airports in Miami-Dade County. The facilities handle commercial, general, and training traffic. Opa-locka West -- a fifth airport -- is located off of Krome Avenue north of U.S. 41 at the Broward County line (Figure 1). The airport was constructed as a military training facility in the early 1940s and was decommissioned in 2006 due to declining use. MDAD is currently investigating options for the use of this underutilized asset to generate revenues for Capital Expansion Programs.

MDAD entered into an Aggregate Extraction Agreement with the Florida Department of Transportation (FDOT) to use the decommissioned airport property for a mine site (Attachment 1). By terms of the agreement, MDAD will obtain the environmental permits for the property, and the FDOT will lease the permitted site to a contract mining company. MDAD will receive revenue from lease payments and royalties and may purchase limestone at a preferred price.

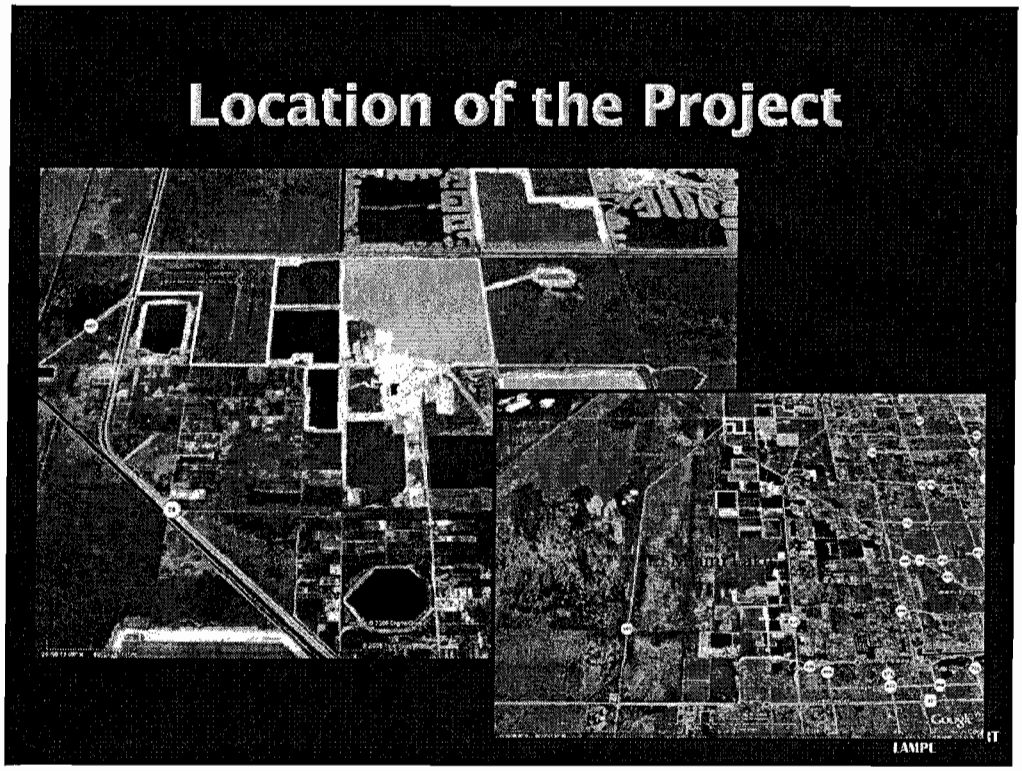


Figure 1 – Location Map.

MDAD retained the consulting firm of Fortin, Leavy, Skiles, Inc. to develop a mine plan and obtain permits. The U.S. Army Corps of Engineers (ACOE) began review of Permit Application No. SAJ-2007-535 (IP-LAO) in 2007 under Section 404 of the Clean Water Act. Future action on

the permit is linked to legal action that focuses on mining activities within an area that was designated as the Miami-Dade Lake Belt by the Florida Legislature. A January 30, 2009 decision by Federal Judge William Hoeveler temporarily suspended all excavation operations authorized by the 2002 ACOE Dredge and Fill Permits for work in the Miami-Dade Lake Belt. The ACOE is preparing a Supplemental Environmental Impact Statement (SEIS) that addresses Judge Hoeveler's concerns. Consequently, the disposition of the Opa-locka mine permit is on-hold pending completion of the ACOE permit which is expected by mid-2009. See Attachment 2 for a copy of the Opa-locka ACOE Permit application.

The Opa-locka mine plan and the permit application are based on government regulations and industry standards regarding mining and reclamation in the Miami-Dade Lake Belt. The Miami-Dade County Board of County Commissioners requested a separate study to explore additional options to enhance environmental benefits and provide recreational opportunities through modifications of the mining and reclamation plans.

Lampl Herbert Consultants conducted research to identify mine planning and operational practices and, separately, new technologies that could be expected to produce landscapes suitable for human recreation and wildlife habitat. The results of the study are presented here. The recommendations would require modification of the ACOE permit application.

This report considers the proposed Opa-locka West mine within the context of mining activities in the Miami-Dade Lake Belt area. Two types of post-mining landscape are discussed. The first landscape reflects an outcome based on present-day mining and reclamation methods. The second landscape "begins with the end in mind" by suggesting changes to the mine plan and reclamation criteria to create a post-mining site that is friendly to humans and wildlife.

Methodology

Lampl Herbert Consultants worked in collaboration with MDAD to identify mining and reclamation options that would result in a transition and final landscape suitable for human recreation and wildlife habitat. The research team beginning with assembling relevant imagery of the property and review of literature related to innovation in mining planning and site reclamation.

Imagery Maps

The team assembled recent and historical imagery and maps for the Opa-locka West site including:

- Aerial photography from the 1950s to recent dates available from Florida Department of Transportation (FDOT), the U.S. Department of Agriculture (USDA), U.S. Geological Survey (USGS), and Google Earth Professional
- Topographic maps from USGS
- Site photos taken during field inspections.

Site Reconnaissance and Interviews

Lampl Herbert Consultants conducted ground level reconnaissance at the project site to evaluate site conditions. Interviews were conducted with county staff (MDAD and Park and Recreation Department) to determine intent and expectations for the Opa-locka West property. A presentation and discussion were conducted with Commissioner Katie Sorenson and staff to gain additional insight on post-mining scenarios.

Innovation in Mine Planning and Reclamation

Lampl Herbert Consultants reviewed the literature of mining and reclamation to identify land use options. The research and reports related to reclamation of limestone mines generally focus on what are known as "dry mines." Dry mines generally occur in areas with a low water table; the remaining quarry or pit may be suitable for recreational uses that include off-highway vehicle (OHV) trails and other activities suited to rugged terrain. Limestone mines in South Florida are considered "wet mines" because of high water table conditions. Current mining operations in south Florida produce straight-walled quarries that offer limited opportunities for safe access by humans and/or other animals.

Arbogast, Knepper, and Langer (USGS, 2000) reviewed various post-mining land uses including conservation, recreation, public facilities, commercial/industrial, and water storage. A summary of post-mining land uses is provided in Table 1.

Post-mining reclamation options are primarily governed by if the mine is wet or dry. For obvious reasons, wet mines are more suitable for water-based land uses (i.e. water recreation, bird and fish habitat, and wetlands) compared to dry mines. Specific to wet mines (limestone quarries in south Florida), the high-sloped steep sides of the mined out areas represent a challenge in post-mining land use due to the limited aerial extent of the biological productive zone in the shallow water areas. As in the case of wet sand and gravel pits (predominately occurring in the western U.S.), the more gradual nature of the shallower sloped sides lends itself to better biological and ecological productivity. Dry mines present a different set of post-mining reclamation opportunities due to the lack of water. Dry mines areas are typically suitable to support buildings and other permanent structure, revegetation and reforeststation,

agricultural, and recreational/open field activities. Wetlands and lakes water features can be incorporated into both wet and dry post-mining reclamation.

Table 1. Types of post-mining uses for wet quarry mines.[1]

Land Use Category	Typical Post-mining Land Use	Potential Post-mining uses at Opa-locka West Airport
Conservation	Passive lakes – Aquatic habitat Passive lakes – Waterfowl habitat Wetland habitat	The possibility exists to create a fisheries/waterfowl aquatic habitat and additional wetland areas in conjunction with aquatic recreational opportunities (swimming, boat, fishing, etc.).
Recreation	Active lakes - Swimming Active lakes – Fishing Recreational trails – Bike, hiking Rock climbing area	Biking/hiking trail system is possible for lake edge areas. Rock climbing (bouldering) area could be created with over-sized boulders mined from quarry.
Public Facilities	Harbor Tidal pool	*Use not anticipated at Opa-locka site.*
Commercial/Industrial	Academic research Ferry terminal Strip commercial along road frontage boarding lakes	Strip commercial along road frontage boarding lakes.
Water Storage	Water supply	Surface water reservoir capacity created at Opa-locka site.

Arbogast et al. also outlined design approaches to reclaim mine sites, which are summarized in Table 2. The natural design approach is not a reality in the regulatory permitting environment and is considered the predecessor design to environmental regulations. Camouflage, although used as a strategy during active mining operations in Florida, is not an acceptable post-reclamation design. Restoration, based on the concept of completely restoring the pre-mining contours, and ecological and hydrological functions, represents the antitheses of natural design. In terms of mine reclamation, restoration is impracticable and far exceeds current regulatory requirements.

Both rehabilitation and mitigation appear to be the most applicable to limestone quarry mining in south Florida under the current permitting atmosphere. Rehabilitation focuses on social and economic benefits by reusing the site for public amenities (especially for sites in or adjacent to urban areas with large population centers). Specific land use designations are created for the benefit of the public for the areas disturbed from mining operations. Through careful planning,

[1] Modified from The Human Factor in Mining Reclamation. (2000). U.S. Geological Survey Circular 1191.

mined lands could conceivably carry a "park and recreation" land use designation that provides a significant public benefit. Water-filled limestone quarries around Florida, such as the one proposed at Opa-locka West, are used primarily for fishing and recreational activities.

Table 2. Design approaches to reclaiming mine sites.[2]

Component	Description	Potential Components Envisioned at Opa-locka West Airport
Natural	Allow nature to reclaim site with no or minimal human influence	*Not anticipated at Opa-locka site.*
Camouflage	Conceal mining facility using visual screens and barriers	*Not anticipated at Opa-locka site.*
Restoration	Return the land to its approximate original contour and function	*Not anticipated at Opa-locka site.*
Rehabilitation (Public/Recreational)	Use site for public amenities	Property may incorporate multiple environmental and recreational uses. Amenities may include a swimming beach, rock climbing (bouldering), trail system, and fishing/boating opportunities.
Mitigation (Environmental)	Repair a mined-out site from extensive human or natural damage	Property may include creation wide littoral shelves and floating islands that should increase biological productivity of the aquatic environment.
Renewable Resource	Recycle man-made or natural resources on site	Property may incorporate surface water storage to enhance Everglades' restorations.
Education	Communicate mining and other resource information through outreach	*May be integrated at Opa-locka site.*
Art	Treat site as work of beauty and unique experience	*May be integrated at Opa-locka site.*
Integration	Combination of approaches integrating art and science	*May be integrated at Opa-locka site.*

A mitigation approach attempts to incorporate scientific input to protect and enhance the environment and return mined lands to beneficial use. Environmental data utilized in mitigation planning include geomorphic setting, watershed, hydrology, soil characterization, vegetation, wildlife habitat, and historical (Arbogast et al., 2000).

A renewable resource design is envisioned for the Opa-locka West site through the creation of recreational and water resource enhancements. Although the education, art, and integration of landscape design approaches are not directly anticipated at Opa-locka West, the concepts could be carried forward into other landscape design approaches similar to other Miami-Dade parks.

[2] Modified from The Human Factor in Mining Reclamation. (2000). U.S. Geological Survey Circular 1191.

Mining in Miami-Dade Lake Belt

History

The Miami-Dade Lake Belt encompasses some 57,000 acres of land oriented along a north-south axis west of the Florida Turnpike in north central Miami-Dade County. The area is known for production of high quality aggregates suitable for construction of highways and buildings. See Figure 2.

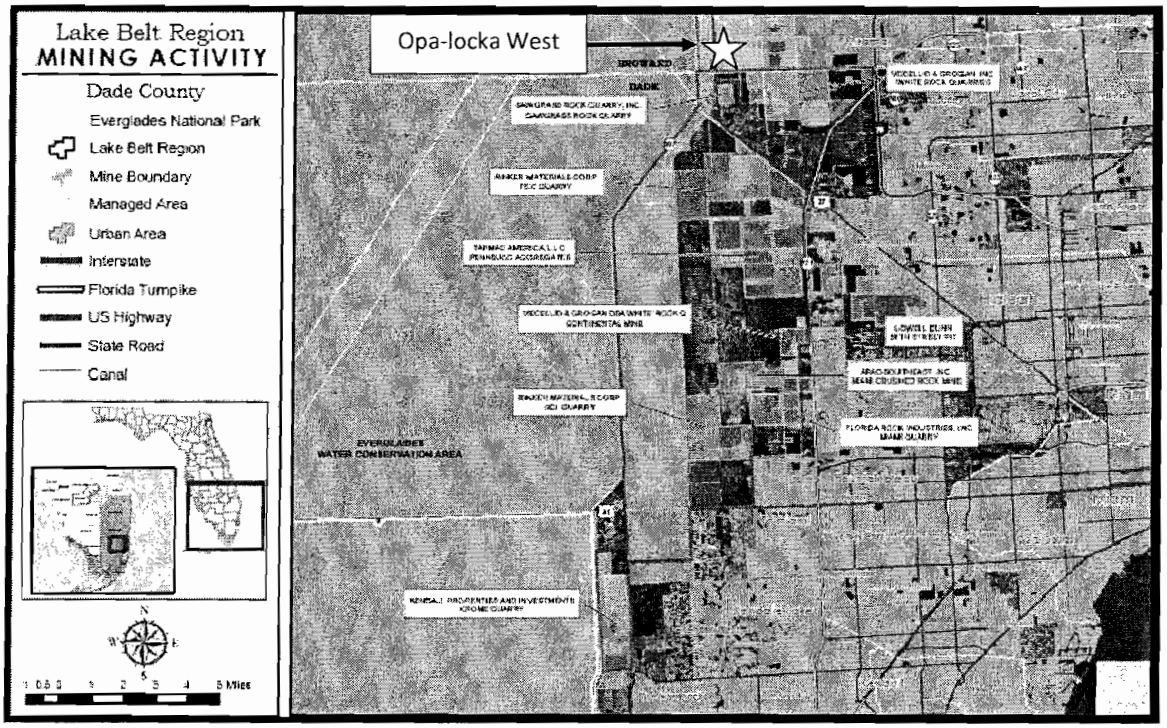


Figure 2 – The Miami-Dade Lake Belt region of Miami-Dade County.

Some of the nation's largest limestone aggregate mines are located within the Miami-Dade Lake Belt where mining companies produce 35-50 million tons of aggregate materials per year, depending on market demand. Approximately 50 percent of the Miami-Dade Lake Belt rock is shipped via rail into Florida's east coast market areas as far north as Jacksonville. The remaining rock and aggregate are hauled by truck to markets in Miami-Dade, Broward, and Palm Beach Counties.

The Miami-Dade Lake Belt was created by the Florida Legislature in 1997 to facilitate the development of large scale mines to serve South Florida and east coast construction markets.

The legislation established a planning process for the district that is headed by the Miami-Dade Lake Belt Implementation Committee which works to:

- Enhance the water supply for Miami-Dade County and the Everglades;
- Maximize efficient recovery of limestone while promoting the social and economic welfare of the community and protecting the environment;
- Educate various groups and the general public of the benefits of the plan. [3]

Mining operations are subject to standard state and federal permitting requirements. Mining in the Miami-Dade Lake Belt is also subject to permit requirements and Florida statutes that created a fee system and fund for mitigation, restoration, and acquisition. This fund is dedicated to restoration of 7,500 acres of wetlands by removal of exotic plants and creation of littoral marshes. The restoration area is a strip of land on the east side of Krome Avenue that has been highly impacted by melaleuca.

The Miami-Dade Lake Belt Plan was implemented in the period 1997 to 2002. Permits issued by the US Army Corps of Engineers (ACOE) c. 2002 allow approximately 5,400 acres to be mined collectively by ten companies over a ten year period (2002-2012). The mining companies originally proposed 50 year mining permits to allow for long-term planning; however, the request was rejected by the ACOE.

Environmental organizations challenged the permits in federal court in 2002 and a judicial ruling in 2007 closed parts of the Miami-Dade Lake Belt to active mining; the most recent ruling – issued in January 30, 2009 stopped active mining/excavation for mines under the 2002 ACOE permits. Stockpiled materials continue to be processed, but excavation has been halted until the legal and environmental issues are resolved.[4]

Mining and Reclamation Practices in the Miami-Dade Lake Belt

The Miami-Dade Lake Belt is prized for the quality of the limestone and the minimal amount of overburden[5]. Mining plans focus on the durable rock found in the Miami and Tamiami limestone formations. Limestone is mined typically from the land surface down to 80 feet with minimal overburden.

The mining process in south Florida involves a multi-phased, straight forward set of tasks. The land surface is stripped of vegetation and soil overburden. Holes are drilled into the face of exposed rock, charges set, and the rock is blasted into small pieces that are removed by large

[3] Miami-Dade County Lake Belt Plan - Chapter 373.4149, F.S.

[4] Resolution of ACOE permit issues will be resolved through submission of a legally acceptable Supplemental Environmental Impact Statement. No timetable is available for resolution of this issue.

[5] Overburden is the soil and non-commercial rock that occurs above the economic rock unit.

capacity drag lines (Figure 3). The result is a series of steep-sided lakes or "wet mines." The materials are crushed and processed into a dozen or more end products used in the construction industry.

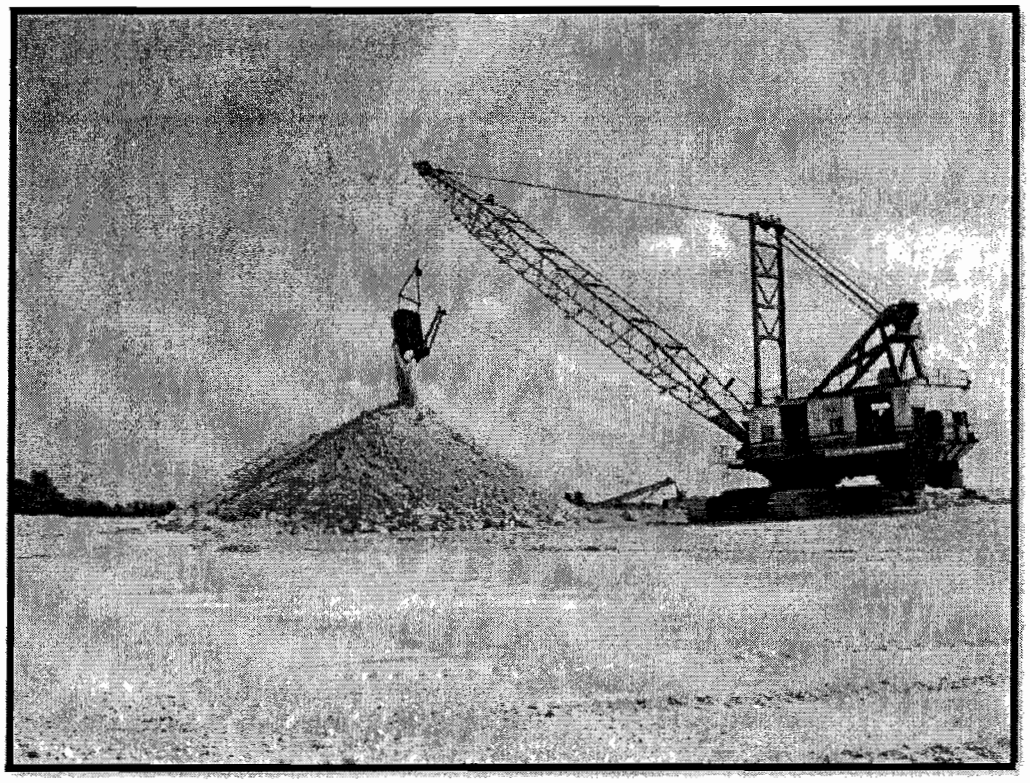


Figure 3 - Typical dragline excavation in Miami-Dade Lake Belt.

The mining excavation creates a deep, freshwater lake that can be used for recreational and water resource development purposes. The Biscayne aquifer is found within a few feet of the surface in the Miami-Dade Lake Belt. The lakes extend downward to the top of the lower confining unit or base of the aquifer. In compliance with regulatory requirements, mining companies leave approximately ten percent of the land around the quarry as a littoral edge and property buffer. However, these narrow littoral areas have minimal biological productivity.

The Proposed Opa-locka West Mine

The Opa-locka West Airport property is located in the northwest corner of the Miami-Dade Lake Belt and was proposed as a joint venture between the Miami-Dade Aviation Department and the Florida Department of Transportation. The partnership intends to mine 410 acres of wetlands on the 416 acre site.

The property is bounded on the north by the Miami-Dade – Broward County line and on the west by US 27 (Figure 4). The east side of the property is adjacent to existing mines operated by the White Rock and Sunshine Quarries. The south and southwest boundaries are bounded by commercial developments and the Sawgrass Quarry. The project is located at the northern end of the Miami-Dade Lake Belt Area and is under the permit and environmental impact review deliberations of the U.S. Army Corps of Engineers.

The mine area is comprised of filled upland areas for two runways and several small barrow pit lakes that were created during development of the airport in the early 1940s. The runways are currently being used as a drag strip for street vehicles under a permit from MDAD. Some native species and features remain including a wetland prairie now overtaken by dense stands of the invasive melaleuca located primarily outside the remaining airport infrastructure.

The Opa-locka mine will produce a range of aggregate and rock products[6]. These will include:

- Coarse aggregate
    - FDOT-approved
    - Commercial-grade
- Base aggregate
    - FDOT-approved
    - Commercial-grade
- Rip-Rap
    - FDOT-approved
    - Commercial-grade

[6] Actual limestone quantity and quality will be determined through FDOT material acceptance testing.

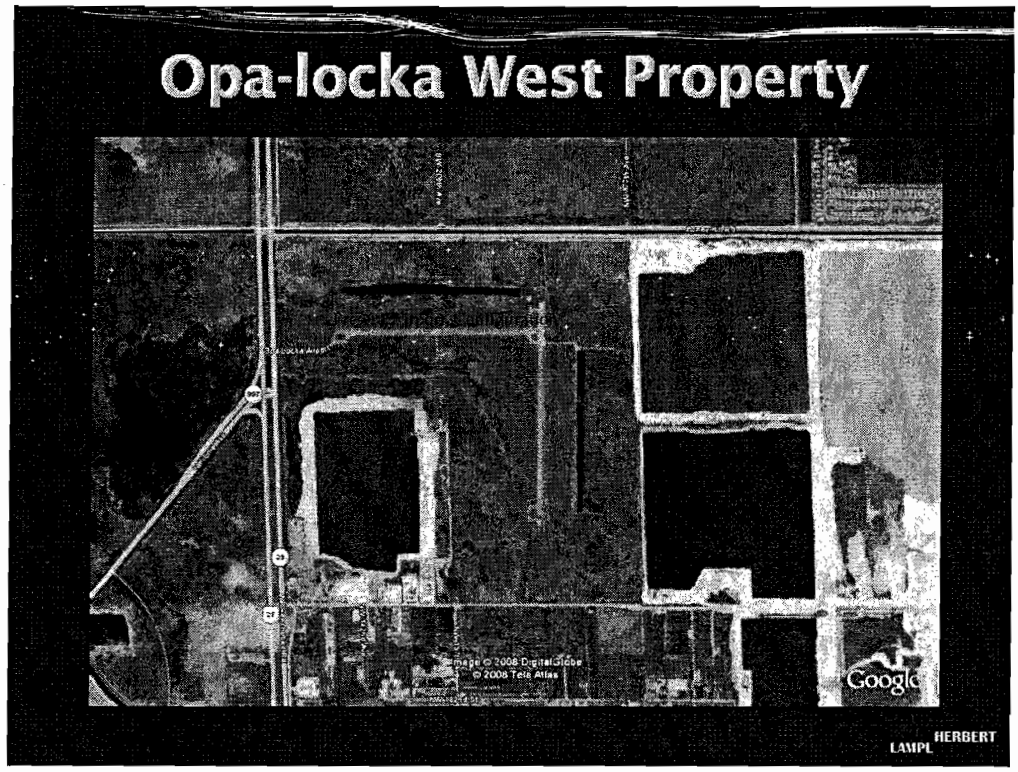


Figure 4 - Map of Opa-locka West property.

Proposed Mining and Reclamation Sequence at Opa-locka West Mine

The mine plan calls for a series of activities to be conducted over the life of the mine (15 to 20 years) that would mirror operations in the Miami-Dade Lake Belt. Each of these steps is described below. The final design for the present scenario is shown in Figure 5.

Clearing and topsoil removal and backfilling

The mining operation begins with the clearing and removal of topsoil and vegetation to create an open work area. Once cleared, the work site is backfilled with limestone fill and graded to create a level and stable surface for the mining equipment.

Drilling and blasting to loosen rock

The mining proceeds with a drilling and blasting operation that breaks the limestone so that it can be removed with a dragline. Blasting may cause surface vibrations that could affect surrounding structures. Blasting would occur on a once-a-week schedule for an active mine.

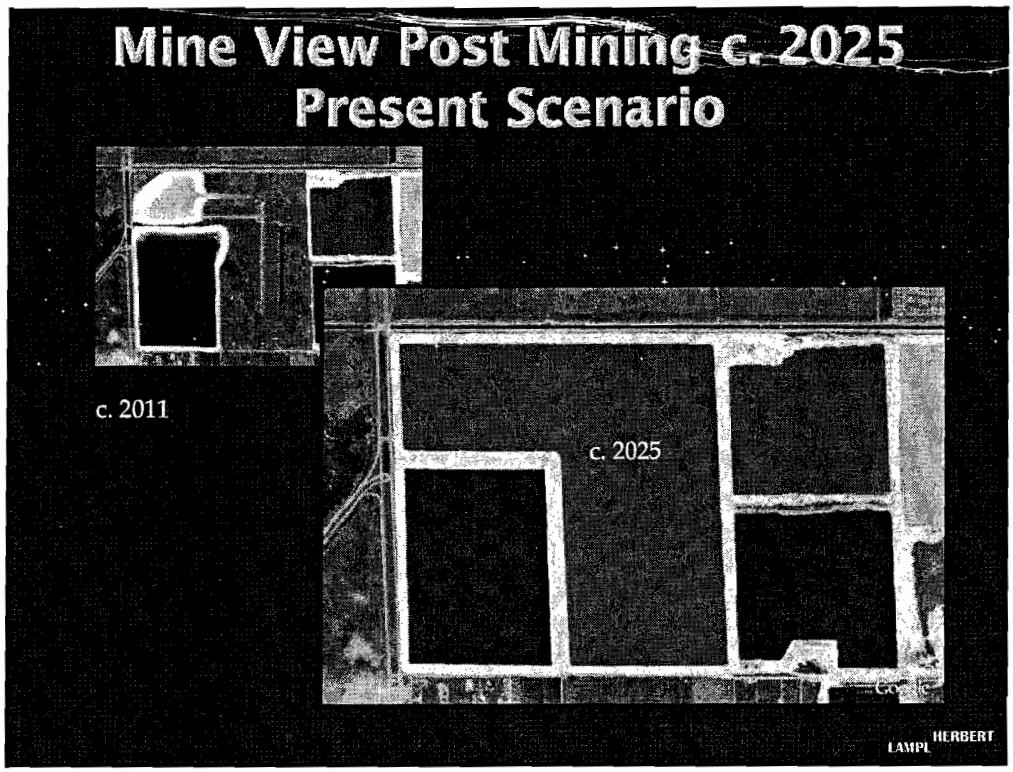


Figure 5 - Proposed final mine design for Opa-locka West property.

Excavation to ±77 feet below land surface

The mining operations will be permitted to a depth of 77 feet below the present land surface. The actual depth of mining will be dependent on the quality of the limestone and the depth of the base of the Biscayne Aquifer. By permit conditions, mining activities are not allowed to breach multiple aquifer zones to prevent mixing of water zones with differing quality.

Reclamation of littoral areas

A littoral shelf in a quarry setting is the shallow transitional area adjacent to the shoreline. The proposed littoral area design consists of a 75-foot wide shallow bench between the property boundary and deep water of the quarry (Figure 6). The mining operations, under the present scenario, will take the excavation to within 100 feet of the property boundary. The resulting lakes generally exhibit both low dissolved oxygen levels and biological productivity below a depth of 10 feet. The narrow fringe areas will provide minimal areas for wading bird habitat and other water fowl.

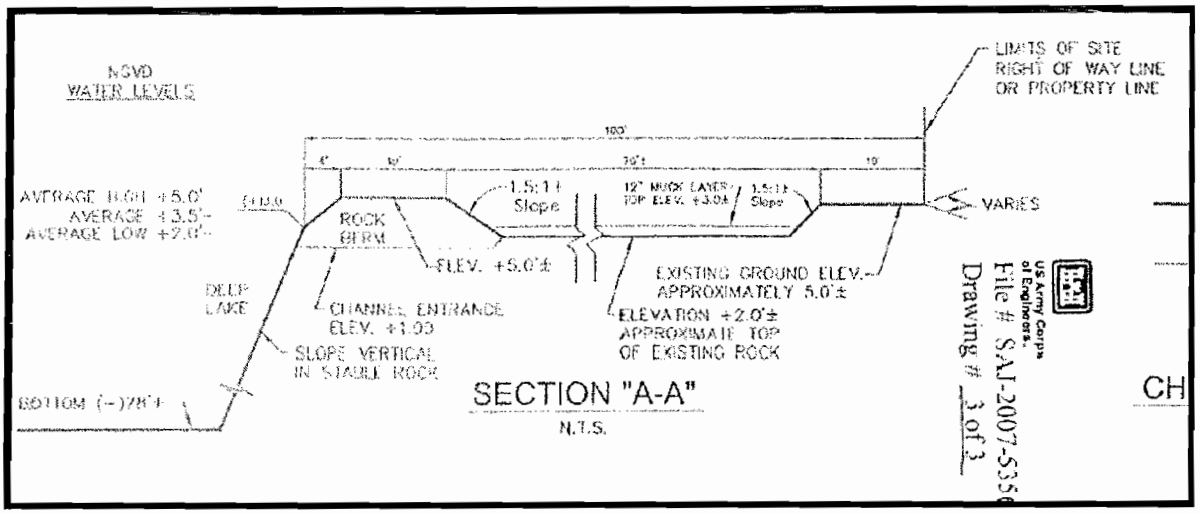


Figure 6 - Littoral area design.

Economic Consideration

South Florida mining operations usually remove materials from the maximum permitted area and depth to maximize the economic return on their reserves. Any deviation from the mine extraction plan generally yields less revenue from mine operations. Options proposed here will be to enhance buffer areas and create littoral transition areas for environmental and recreational benefits. Consequently, the scenarios discussed here will reduce the overall economic return (in terms of mining operations) by leaving "mineable limestone" in place at the proposed Opa-locka mine. However, through expanding the scope to include environmental and recreational options, additional revenue may be recaptured by mining through adjacent property boundary area(s).

The mining project will proceed with the FDOT acting as the lead to create a lease document, advertise, and seek bids for "contract mining" of the property. MDAD will be the landowner representative for operations and will receive fees from the mining operations based on the amount of materials excavated, processed, and sold within an accounting period.[7] The amount of revenue received by MDAD will be dependent on market demands and pricing over the life of the mine.

The Miami-Dade Aviation Department is scheduled to receive a revenue stream over a period of 15-20 years from sales of aggregates and is estimated to be $250-$475 million depending on market conditions.[8]

[7] Under the conditions within the Aggregate Extraction Agreement, FDOT will handle the mining through a lease/contractual agreement with a mining company.

[8] Revenue projections based on MDAD supporting documents.

Alternative Mining Scenarios through Adjacent Property Acquisition

As described in the above sections, the present mining and post-mining scenario follows the design and reclamation plans consistent with other mines operating in the Miami-Dade Lake Belt. In order to transition to a post-mining project that incorporates additional environmental and recreational benefits (above and beyond a typical mine in the Miami-Dade Lake Belt), innovative design and concepts should be employed. Miami-Dade County should consider expanding the scope of the project from the 416 acre Opa-locka site to include adjacent mine properties. These adjacent properties will be "mined out" in the near term as the Opa-locka mine begins operation.

Mined out properties generally have limited economic value. The proposed Opa-locka West mine site is outside the 2015 and 2025 Miami-Dade County Urban Service Boundaries (USB), thereby limiting potential post-mining development.[9] In some cases, mining companies have been able to reclaim sites for recreation and other uses. The Lake Belt Plan II contemplates transfer of mined properties from mine/property owners to a public entity for conservation, water resource management, and/or recreational purposes.[10] Land transfer mechanisms include conservation easements or fee simple donation. The individual mine permits in the Miami-Dade County Lake Belt set out conditions for disposition of property. Prospective recipients, e.g. Miami-Dade County, should investigate the potential liabilities and risks prior to land transfer.

Miami-Dade County has the opportunity to design the Opa-locka West Airport property to create environmentally productive, recreational amenities as this project proceeds. The process to accomplish greater environmental productivity will result in some lost revenue for materials that are not mined on the Opa-locka property. These potential "lost" revenues can be recaptured by the acquisition and modification of adjacent mined-out properties. In a larger context, acquisition of adjacent mined properties should enhance the environmental productivity of the water areas and provide for several additional recreational and water resource opportunities into the future.

The following sections of this report describe the presently proposed mining scenario under consideration by permitting agencies. Other scenarios are offered and discussed that create environmental and recreational opportunities. The process of reworking the mined landscape should generate revenues to offset development costs and provide additional revenues to the county.

---

[9] http://www.miamidade.gov/planzone/CDMP_landuse_map.asp

[10] http://www.sfwmd.gov/portal/page?_pageid=1874,4167195,1874_4164189:1874_4166101&_dad=portal&_schema=PORTAL

Scenario 1: Opa-locka Beach Environmental and Recreational Development

This scenario is presented as the first of three scenarios that could be sequenced over the life of the Opa-locka mine development and the mine out of reserves on adjacent properties in the northern Miami-Dade Lake Belt area. The scenario here expands the environmental and recreational enhancements proposed above. Because of the enhanced water-based recreation, this is termed the "Opa-locka Beach Scenario[11] (Figure 7)." The first step would be for Miami-Dade County to acquire the water body that was created for the Sawgrass Rock Quarry southwest of the Opa-locka property and the water bodies for the Sunshine and White Rock Quarries on the eastern boundary. With these properties in Miami-Dade County ownership, the following scenario could be developed.

Scenario 1 – Potential Environmental and Recreational Upgrades

Environmental Upgrades

- Development of Opa-locka Beach by creating an expanded shallow, wetland fringe along a peninsula between the two lakes with a littoral zone of 200 feet with slopes of 1:10
- Creation of 5-7 acres of new wetlands fringe
- Placement of floating islands along the shorelines to increase biological productivity.

Recreational Upgrades

- Creation of a 10-acre parking and picnic area on west side off US 27
- Creation of "Opa-locka Beach" as a shallow and safe freshwater beach along the southwest property boundary; the beach would face both north and south from the peninsula
- Creation of a trailhead for bicycle trails around the lakes
- Creation of a rock climbing / bouldering area near the beach complex.

[11] For purposes of discussion, the working name "Opa-locka Beach" was given to the scenario to emphasize the environmental and recreational components.

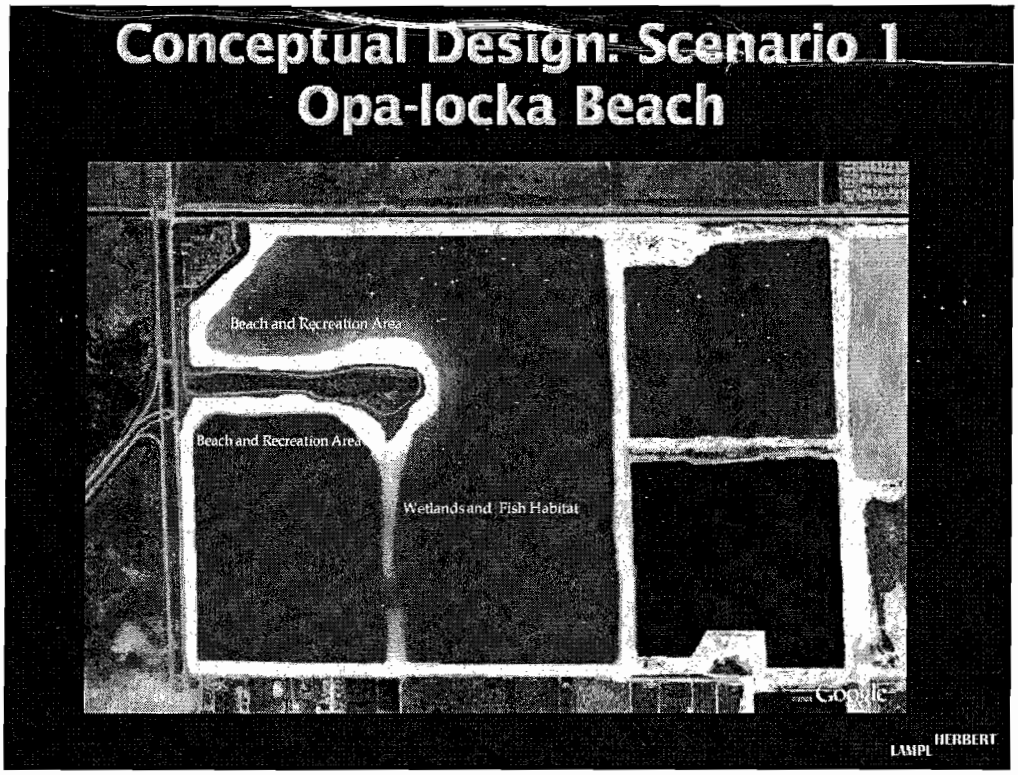


Figure 7 - Conceptual design for Opa-locka Beach recreational and environmental enhancement of the quarry excavation.

Scenario 1 - Opa-locka Beach Environmental and Recreational Enhancements

Recreational and environmental enhancement can begin subsequent to the start of mining excavation. The mining equipment would be used to shape the slopes and post mining configuration of the beach areas at the on-set of the operations rather than the present methods which leave near vertical walls on the outside of the excavation at the property line. This scenario requires that Miami-Dade County acquire the lake created for the Sawgrass Rock Quarry to carry out this scenario.

The Opa-locka Beach recreational improvements could be to create a wide and shallow littoral zone that would form a safe swimming beach. Outside the swimming beach area, vegetation would be propagated along the shallow edge increasing fish habitat and shallows for wading birds. The deeper zones, below 12-15 feet, can be enhanced with floating islands to create fish structure and to provide improvements to the food chain.[12]

[12] The concept of floating islands is discussed at the commercial website for Floating Islands International, Inc., at http://www.floatingislandinternational.com/

Within the boundaries of the Scenario 1 area, a 20-30 acre wetlands fringe would be created, including shallows along the North-South property boundary, where additional rock could be excavated to create water depths in the range of 6-12 feet which is ideal for rooted aquatic vegetation. This concepts area is shown in Figure 8.

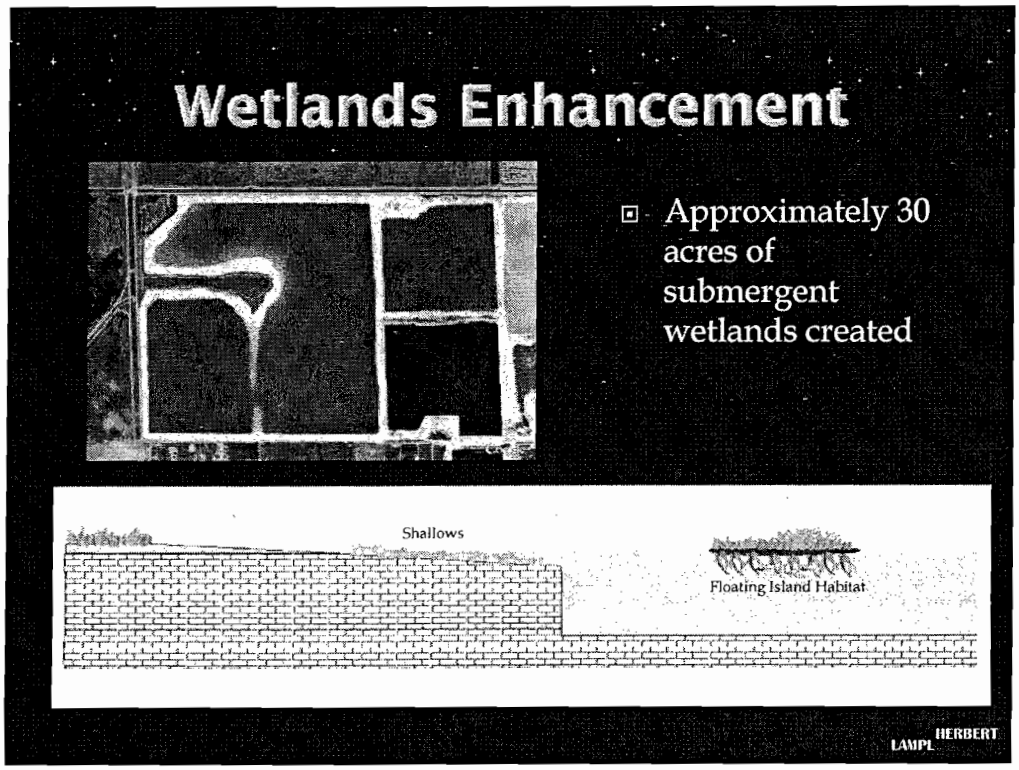


Figure 8 - Wetlands enhancements to the Opa-locka Beach scenario.

Adjacent land could be enhanced to support the Opa-locka Beach concept through the creation of picnic and swimming beach concession areas, wetlands areas, and bike trailhead that could make use of a trail system created around the northern Miami-Dade Lake Belt. Larger boulders from the mining operation could be placed near the trailhead to create a rock climbing/bouldering recreational area. A rock climbing feature would be an inexpensive, low maintenance amenity that is consistent with contemporary recreational interest. The improvements are depicted in Figure 9.

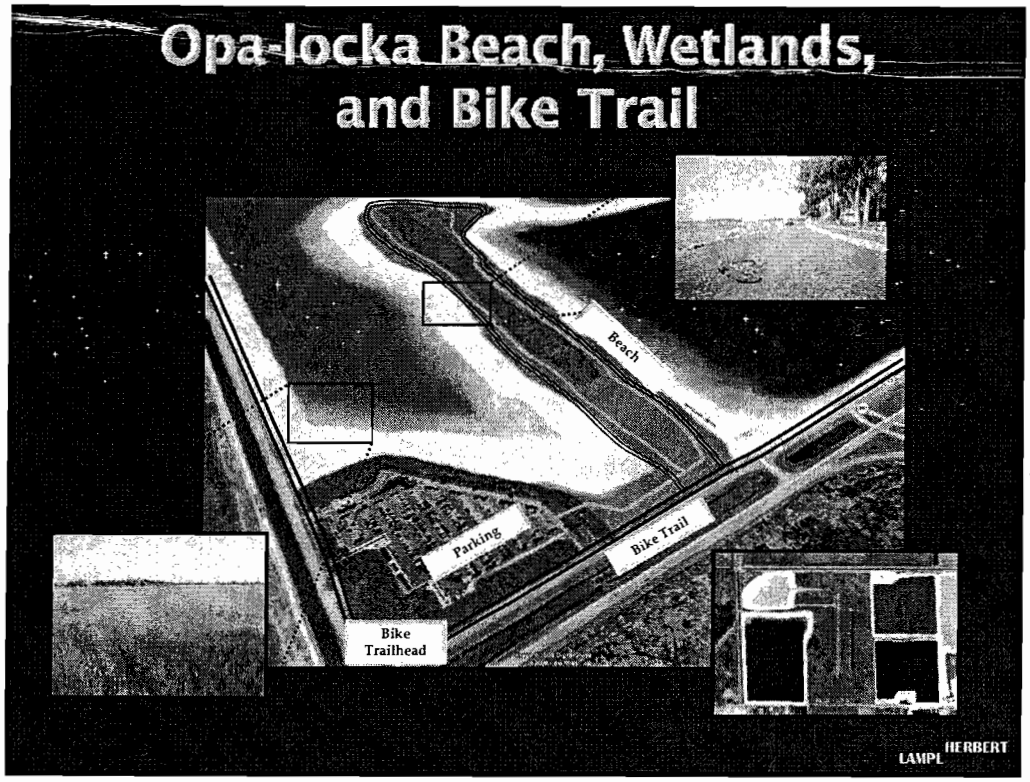


Figure 9 - Recreational complex at Opa-locka Beach.

Scenario 1 - Opa-locka Beach Economic Considerations

The economic considerations of the Opa-locka Beach Scenario would include acquisition of the Sawgrass Quarry property. If this additional property is acquired, the application for environmental permits for the Opa-locka site would need to be revised to incorporate the Sawgrass Quarry into the Opa-locka Beach concept. Miami Dade County would not meet the revenue projections for the Present Scenario. Approximately 25 acres or about 6% of the 410 acres of surface area – some 3.5 million tons of rock valued at $12 million -- would remain to create the recreational beach and wetlands.[13] MDAD should expect a similar loss of revenue if it created Opa-locka Beach by leaving 3.5 million tons of rock in place to create these amenities. MDAD may, however, recapture some portion of the $12 million in lost revenues if it acquires the Sawgrass Quarry and sells the rock removed from the "land between the lakes" in the enhancement process.

Development costs for the creation of the Opa-locka Beach recreational complex will be dependent on final design. In addition, there is a potential to develop mitigation credits and generate revenues from the creation of shallow wetland areas and through the implementation

[13] Based on estimates using 2009 aggregate prices.

of floating islands (Figure 10). According to preliminary studies on the biological impacts of floating islands, they produce a concentrated wetland effect with a significant increase in productivity over wetland shallows resulting from the creation of surface area through the upper 10 feet of the water column.[14] The surface of the floating islands provides nesting areas for shore birds.

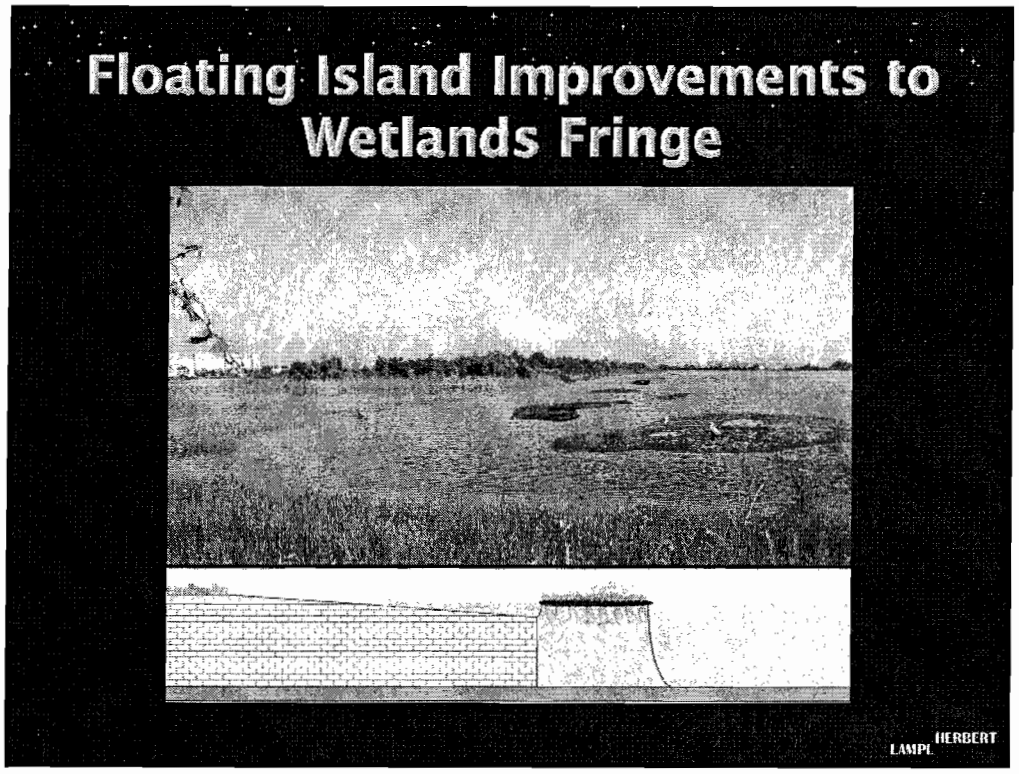


Figure 10 - Fringe wetland improvements with floating islands.

Scenario 2: Expanded Environmental and Recreational Lake Development

The Opa-locka Beach Scenario can be expanded to create additional environmental, recreational, and economic benefits for the county. The process to accomplish an expanded and recreational lake development scenario would begin with an agreement with the owners of the White Rock Quarry and Sunshine Rock Quarry for purchase/acquisition of lakes that have been excavated under Miami-Dade Lake Belt mining permits (Figure 11). Miami-Dade County would modify the present scenario mining plans for 410 acres of mining to eliminate the "land between the lakes" (i.e. lake divides) that separate individual ownerships. Miami-Dade's

[14] http://www.floatingislandinternational.com/fi_pages.php?name=m83

ownership would allow the lake divides to be removed to create additional wetlands and shallow water fish habitat.

Figure 11 - Acquisition of adjacent lakes would allow additional wetland improvements to a larger lake system.

Scenario 2 – Potential Environmental and Recreational Upgrades

This scenario would create a larger lake complex with the potential to create additional recreational amenities. The Opa-locka Beach plan would create a lake of approximately 550 acres; the addition of the two quarries to the east would add approximately 250 acres to the project. The resulting 800 acre lake would expand the boating opportunities to include sailing, racing shells, and kayaking. The removal of the land between the lakes to a depth of 12 feet would create an additional 25-30 acres of shallows and wetlands depending upon the final designs.

Scenario 2 - Economic Considerations

The removal of the land between the lakes (property divides) would produce approximately 600,000 tons of additional aggregates by mining to -12 feet across the property divides. This amount of material could be sold to produce additional revenues. If the lake divides are removed to a depth of -77 feet, there would be 4.5 million tons of rock available for sale.

The acquisition costs for the Sunshine and white Rock Quarries is front end expenditure for this scenario. The county would recapture the revenues potentially lost from the development of Scenario 1. There are additional revenue options by using the shallow water areas and floating islands as mitigation revenue sources.

Scenario 3: Multi-purpose Environmental, Recreational Lake, and Water Resource Development Project

Alternate Scenario 3 envisions a larger lake complex with the options for Miami-Dade to recapture additional revenues by mining additional lands between properties. This scenario would call for Miami-Dade County to acquire other White Rock lakes west of Turnpike (821), south of C-9 Canal, north, and east of US 27. The county would provide contiguous ownership of nearly 2,800 acres that could be transformed into a single water body. Figure 12 depicts the properties to the east of Opa-locka that would be required for this alternative.

Scenario 3 – Potential Environmental, Recreational, and Water Resource Upgrades

A 2,800 acre lake would be created that provides significant opportunities for water recreation such as sailing, boating, and fishing. Removal of land buffers between the quarries could create several hundred acres of shallow water for fish and wildlife propagation. The lake could also be integrated into water resources planning and improvements for the Comprehensive Everglades Restoration Plan.

Scenario 3 - Economic Considerations

This scenario would allow the recovery of an additional 10-15 million tons of aggregate if divides are removed to full depth (-77 feet) throughout the area. Revenue derived from this scenario could be used to offset acquisition costs of lakes and provide additional revenues to MDAD. These projected revenues could be reduced by 90% if the lake divides are removed only to a depth of 12 feet.

Figure 12 - Additional property that could be acquired to form a larger lake system.

Next Steps

The concepts developed here to increase the environmental and recreational potential of the proposed Opa-locka mine site need to be evaluated by county staff and presented to the Board of County Commissioners for concurrence and preliminary approval. The uncertainties of the ACOE permits that have halted active excavation in the Miami-Dade Lake Belt have temporarily stalled permitting at Opa-locka. The legal process to resolve the ACOE permit challenges should be monitored closely. Presented below are the recommended next steps to move the proposed Opa-locka mine project forward.

- Present concepts to Board of County Commissioners
- Monitor resolution of legal issues in the Miami-Dade Lake Belt
- Conduct scoping of environmental issues with regulatory agencies and stakeholders
- Investigate acquisition of adjacent mine properties
- Develop specific plans that incorporate environmental and recreational enhancements
- Evaluate mine permit modification required to expand the Opa-locka project.

Attachment 1

Extraction Agreement with the Florida Department of Transportation (FDOT)

Memorandum

MIAMI-DADE COUNTY

Date: December 4, 2007

Amended
Agenda Item No. 8(A)(1)(C)

To: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Resolution approving an Aggregate Extraction Agreement between the Florida Department of Transportation (FDOT) and Miami-Dade County on 422 acres of undeveloped land formally known as Opa-locka West General Aviation Airport; Recommending waiver of competitive bids in regard to such Agreement

R#1294-07

Recommendation

It is recommended that the Board waive competitive bids under Section 5.03(D) of the Home Rule Charter and approve the attached Aggregate Extraction Agreement with the Florida Department of Transportation (FDOT) for the approximately 422 acres of undeveloped land formerly known as Opa-locka West General Aviation Airport. The term of the contract is for 10 years with two five-year options for renewal at the discretion of FDOT and MDAD.

Scope

The former Opa-locka West General Aviation Airport is located primarily within Commission District Twelve. However, the impact of this agenda item is countywide in nature as this site is a regional asset.

Under this Agreement, FDOT shall act as Manager for the purpose of mining limestone rock on the aforementioned 422 acres, to include assisting the County to secure and retain all necessary federal, state and County permits; assisting the County to secure an extraction/sales company to mine and sell the limestone; and assisting the County to market the limestone.

The limestone rock taken from OPF-West shall be sold in accordance with the following priorities: (1) To customers for use of the limestone rock for FDOT, MDX, or County projects in Miami-Dade County; (2) to customers for use of the limestone rock for FDOT or MDX projects in the State of Florida; and (3) to other customers. FDOT shall oversee the allocations of limestone rock to assure such allocations are in reasonable accordance with this priority. (MDX is included due to the fact that their projects have the potential of becoming a large volume user and their projects benefit Miami-Dade County.)

Fiscal Impact/Funding Source

This is a revenue-generating item. The net revenue ranges from a conservative estimate of $246.5 million over 24 years, to a more aggressive estimate of $473.2 million over 19 years. FDOT receives no management fee, but instead will receive along with MDX and the County, a volume discount for its contractors. Several safe guards will be utilized by the mine operator and the end users to ensure that the rock is delivered to its designated project. Volume discounts, generally ranging from 10 to 15 percent, are customary in the industry for large-volume buyers, with the high end being offered to an inter-related business of the mining company. The initial discount under this agreement will be 14.9 percent. MDAD and FDOT may re-negotiate this 14.9 percent discount if industry practice, driven by a major shift in market conditions, should change.

The per ton price of the rock will be established twice a year on January 1st and July 1st by FDOT and approved by the County. At that time, MDAD will notify user departments of the per tone price of the rock. If there are major fluctuations in the market prices, FDOT may recommend that the price be adjusted more frequently, subject to the County's approval.

MDAD is requesting to reimburse FDOT $74,666.00 for an expense FDOT incurred for including OPF- West in the then on-going Supplemental Environmental Impact Study (SEIS) addressing rock mining in the Lake Belt Area. It was much less expensive to include them in the on-going study as opposed to conducting a stand alone-study for OPF-West. The Draft SEIS was issued in October 2007 and the Final Environmental Impact Study is expected to be issued in February 2008.

Contract/Project Monitor

26

FDOT has had an excellent track record of meeting both its financial and non-financial obligations with the County. The Miami-Dade Aviation Department (MDAD) and FDOT are currently collaborating on a number of other ventures to enhance the operations at Miami International Airport (MIA). They include the Miami Intermodal Center (MIC), the Rental Car Facility (RCF), widening of LeJeune Road, and the 25th Street viaduct in support of air cargo operations.

This agreement with FDOT is being recommended for the following key reasons:

1) FDOT's demonstrated vast knowledge of the rock mining industry
2) Ability to market the sale of aggregate to FDOT's large pool of contractors
3) FDOT's unique capability to secure the required rock mining permits
4) The absence of a payment to FDOT for its role.

Miguel Southwell, MDAD Assistant Aviation Director, will monitor this Agreement.

Background

As a result of population growth, there has been a rapid increase in the demand for limestone aggregate, which is an essential component in building homes and maintaining and constructing roads. A major source of that demand is FDOT through its contractors that purchase aggregate in large volumes for the maintenance and construction of roads throughout the State of Florida. Much of that construction takes place in Miami-Dade County.

This rise in demand has resulted in an escalation in the price of aggregate, approximately doubling in the past five years. This price hike may further be exacerbated by the recent challenge against certain existing mining permits; including mines located in the County's Lake Belt area. Concerned over the continuous and rapid rise in the cost of aggregate for its use in road construction projects, FDOT is interested in finding additional sources of aggregate.

Separately, MDAD is facing a financial crisis and, between now and the year 2015, must increase its annual revenue from what is now approximately $600 million per year to $1.1 billion. Airlines operating at MIA are legally obligated to cover the portion of the cost to operate MIA and the County's five general aviation airports that is not covered by revenues collected from concessionaires and other non-airline sources. Already, MIA's incumbent and potential new airlines cite the high cost of operating at MIA as a hindrance to growing or initiating service at the Airport. Therefore, there is a crucial need for new sources of non-airline revenue. The mining of limestone at Opa-locka West offers a major opportunity to grow such revenue.

Opa-locka West opened in April 1970. The Airport is located north of the Lake belt area. It was used for touch-and-go training and consists of two 3,000-foot runways with turnarounds at the ends and a small ramp area to park aircraft. There were no based-aircraft or storage facilities at Opa-locka West. Given the low level of activity at Opa-locka West, the Airport was decommissioned in 2006.

It is estimated that 44.6 to 50.4 million tons of limestone exists beneath the surface of the property. This agreement between MDAD and FDOT will provide synergistic results to generate crucially needed non-airline revenue to MDAD, and provide another vital source of aggregate for FDOT, which has the vast experience with the rock mining industry.

Because of the importance of selecting FDOT to serve as managing agent for the rock mining activities at the former Opa-locka West airport, it is recommended that the Board waive competitive bids so that the agreement selecting FDOT as the managing agent may be approved by the Board, such approval being in the best interest of the County.

Section 709 of the 2002 Amended and Restated Trust Agreement applicable to Aviation Revenue Bonds permits the sale or disposal of Port Authority Properties. Section 709 further provides that the proceeds of such sale "shall be deposited to the credit of the Redemption Account in the Sinking Fund, the Reserve Maintenance Fund or the Revenue Fund as the Board shall by resolution determine." The attached resolution provides for the deposit of the rock mining proceeds to the credit of the Revenue Fund.

Assistant County Manager

24 27

MEMORANDUM

(Revised)

TO: Honorable Chairman Bruno A. Barreiro and Members, Board of County Commissioners

DATE: December 4, 2007

FROM: R. A. Cuevas, Jr. County Attorney

SUBJECT: Amended Agenda Item No. 8(A)(1)(C)

Please note any items checked.

____	"4-Day Rule" ("3-Day Rule" for committees) applicable if raised
____	6 weeks required between first reading and public hearing
____	4 weeks notification to municipal officials required prior to public hearing
____	Decreases revenues or increases expenditures without balancing budget
____	Budget required
____	Statement of fiscal impact required
✓	Bid waiver requiring County Manager's written recommendation
____	Ordinance creating a new board requires detailed County Manager's report for public hearing
____	Housekeeping item (no policy decision required)
____	No committee review

B 28

Approved	Mayor	Amended
Veto		Agenda Item No. 8(A)(1)(C)
Override		12-4-07

RESOLUTION NO. 1294-07

RESOLUTION APPROVING AGGREGATE EXTRACTION AGREEMENT BETWEEN MIAMI-DADE COUNTY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) UNDER WHICH FDOT WILL SERVE AS THE MANAGING AGENT FOR ACQUIRING PERMITS, SELECTING A ROCK MINING CONTRACTOR, AND ASSISTING WITH THE MARKETING AND SALE OF LIMEROCK EXTRACTED FROM THE COUNTY'S FORMER OPA-LOCKA WEST GENERAL AVIATION AIRPORT; WAIVING COMPETITIVE BID PROCEDURES UNDER SECTION 5.03D OF THE HOME RULE CHARTER; AUTHORIZING MAYOR OR DESIGNEE TO EXECUTE SUCH AGREEMENT; AUTHORIZING THE MAYOR OR DESIGNEE TO EXERCISE THE TERMINATION PROVISIONS THEREOF; DESIGNATING THE ACCOUNTING FUND INTO WHICH THE PROCEEDS RECEIVED BY THE COUNTY UNDER SUCH AGREEMENT SHALL BE DEPOSITED

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board hereby approves the attached Aggregate Extraction Agreement between Miami-Dade County and the Florida Department of Transportation (FDOT) under which FDOT will serve as the managing agent for acquiring extraction permits, selecting a rock mining contractor, and assisting in the marketing and sale of limerock extracted from the County's former Opa-locka West General Aviation Airport to customers of FDOT, the Miami-Dade County Expressway Authority (MDX), and the County first for projects in Miami-Dade County and second for projects in the tri-county area of Miami-Dade, Broward, or Monroe Counties; waives competitive bidding procedures under Section 5.03D of the County's Home Rule Charter, based upon the written

recommendation of the Manager and having found and determined by two-thirds vote of the members present that it is in the best interest of the County to waive competitive bidding for such agreement; authorizes the Mayor or designee to execute such Agreement; authorizes the Mayor or designee to exercise the termination provisions of such Agreement; and determines, as required by Section 709 of the Amended and Restated Trust Agreement of 2002 applicable to bonds issued by the County for its Airport System, that the proceeds received by the County under such Agreement shall be deposited by the Aviation Department into the Revenue Fund created under Section 502 of such Trust Agreement, but reserving to the County the right to make other determinations in the future as to where such funds shall be deposited.

The foregoing resolution was sponsored offered by Commissioner , who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

Bruno A. Barreiro, Chairman
Barbara J. Jordan, Vice-Chairwoman

Jose "Pepe" Diaz	Audrey M. Edmonson
Carlos A. Gimenez	Sally A. Heyman
Joe A. Martinez	Dennis C. Moss
Dorrin D. Rolle	Natacha Seijas
Katy Sorenson	Rebeca Sosa
Sen. Javier D. Souto	

The Chairperson thereupon declared the resolution duly passed and adopted this 4th day of December, 2007. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By:_____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency. TPA

Thomas P. Abbott

AGGREGATE EXTRACTION AGREEMENT

BETWEEN

MIAMI-DADE COUNTY

AND

THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

THIS AGREEMENT is entered into this ____ day of_____, 2007, by and between Miami-Dade County ("County") and the State of Florida, Department of Transportation ("FDOT"),

WHEREAS, the County owns a parcel of land in Miami-Dade County consisting of approximately 422 acres of undeveloped land that was formerly used as a General Aviation Reliever Airport known as Opa-locka West General Aviation Airport (such parcel, for purposes of this Agreement, being known as "OPF-West"); and

WHEREAS, OPF-West has a considerable amount of limestone on its premises and the County has discontinued the use of OPF-West as a General Aviation Reliever Airport; and

WHEREAS, the FDOT is responsible for constructing highways and other transportation projects for the benefit of the traveling public, and requires a considerable amount of limestone to be used in conjunction with such projects; and

WHEREAS, the parties desire to enter into this Agreement to reflect the role FDOT will play in MDAD's efforts to (a) obtain all permits necessary for the limestone mining operation, (b) take appropriate and suitable steps to secure such permits and not cause a premature cancellation thereof by the issuing agency, (c) find a suitable extraction company, and (d) market and sell the limestone under optimal conditions from year to year;

NOW THEREFORE, in consideration of the premises and of the promises and other consideration provided herein, the receipt and sufficiency of which are acknowledged by the parties, the parties agree as follows:

1. FDOT'S ROLE.

(A) FDOT shall act as the Manager for the purpose of securing an extraction/sales company and overall monitoring of the extraction process with particular emphasis upon quality control and the achievement of production targets. In this capacity, FDOT shall serve as an independent contractor and not as a partner, joint venture partner, principal, or agent of or with the County.

(B) FDOT shall assist MDAD with any and all permit applications forms and other documents by which the County will obtain all applicable federal, state, and County approval to engage in limestone mining at OPF-West. FDOT agrees to add its signature to all such applications and documents, or, if the parties agree that a single signature is appropriate, FDOT agrees that it will sign the applications and documents to the extent authorized or required by the particular permitting authority. FDOT will stay in close contact with MDAD personnel during the permit application phase so that the permits are obtained at the optimal timing and under the optimal conditions.

(C) FDOT agrees to use competitive solicitation pursuant to Florida Law to select the extraction company in order to assure reasonable extraction fees. The selection shall be based upon the lowest extraction cost per ton submitted by a responsible bidder. The Aviation Director or his designee shall participate in the selection process. Upon award and execution of the extraction/sales contract FDOT shall assign the contract to MDAD.

(D) FDOT shall direct its contractors, on select contracts, to secure limestone from OPF-West when it is in the best interest of the state and the cost of the limestone in-place at the project location is competitive with other commercially available sources.

(E) FDOT shall maintain records pertinent to its oversight of the extraction/sales company and shall include in its solicitation documents the requirement that the extraction/sales company maintain sufficient and appropriate records reflecting the extraction operations and the sales made, and make such records available to both FDOT and the County at all reasonable times. For FDOT's own reports, the County shall be entitled to inspect all FDOT and extraction/sales company reports, as related to this Agreement, at reasonable times. FDOT shall provide periodic reports of the operations, not less frequently than quarterly, and shall provide annual summaries not later than October 30 of each year.

2. EXTRACTION/SALES COMPANY'S ROLE.

(A) The extraction/sales company shall be exclusively responsible for determining, collecting, and remitting (a) the amount of Florida sales taxes to be collected on all sales hereunder, in the event the sales transactions are not exempt from sales taxes, (b) all other federal, state, or local taxes or fees applicable to sales transactions hereunder, and (c) all State imposed mitigation fees hereunder.

(B) The extraction/sales company shall employ customary and reasonable terms and conditions of sales of limestone rock that are consistent with sound business practices prevailing in the industry.

(C) The extraction/sales company shall, consistent with sound mining practices, maintain annual production quotas established by FDOT, MDAD and the company, and adhere to FDOT's quality control and quality assurance procedures as set forth in Standard Specs, Aggregate Manuals, etc.

3. TERM. The term of this Agreement shall be for ten (10) years, with two (2) five (5) year extension options at the discretion of the FDOT and MDAD.

4. COMPENSATION TO THE COUNTY. The net amount of each sale that remains after deducting extraction costs, sales taxes, and other taxes and fees shall be remitted daily to the County by the extraction company, or within a period otherwise agreed upon by MDAD and the extraction company.

5. EXTRACTION RATE. The parties shall determine on an annual basis, during the month of July, the estimated amount of limestone rock that will be extracted during each fiscal year of the County (October 1 through September 30) for the duration of this Agreement. The rate of extraction will be at a reasonable level, consistent with the production quotas established in Section 2(C), prudent mining practices, and in consideration of the quality of life of the residents, commercial interests in the area, and the environment.

6. PERMITTED CUSTOMERS. The limestone rock taken from OPF-West shall be sold in accordance with the following priorities: (1) To customers for use of the limestone rock for FDOT, MDX, or County projects in Miami-Dade County and (2) to customers for use of the limestone rock for FDOT or MDX projects in the tri-county area consisting of Miami-Dade County, Broward County, and Monroe County. Unless approved by the Board of County Commissioners of Miami-Dade County, the rock may not be sold to any customers other than those involved in FDOT, MDX, or County projects and such projects must be located on a first priority in Miami-Dade County and on a second priority in the tri-county area of Miami-Dade, Broward, or Monroe Counties. FDOT shall oversee the allocations of limestone rock to assure such allocations are in reasonable accordance with the priorities set forth in this paragraph.

7. SELLING PRICE OF ROCK:

(A) The selling price for all limestone shall be at the cash price at the time of each sale or a preferred price as may be justified and customary for a large volume of rock being purchased by a single customer or its contractors. In consideration of their commitment to utilize each year from OPF-West, large volumes of rock required for their substantial annual work programs, FDOT, MDX and the County shall be considered "preferred" customers. As a "preferred" customer, FDOT, MDX and the County, through their contractors when working on, and for use in, FDOT, MDX and County projects only, shall receive such customary industry preferred rates currently equaling 14.9 percent discount of the cash price. MDAD and FDOT may re-negotiate this

14.9 percent discount if industry practice, driven by a major shift in market conditions, should change.

(B) The cash price shall be established twice a year, once on January 1st and then on July 1st, by the FDOT and approved by the County. FDOT will survey the market rate for limestone rock of the type being extracted from OPF-West and being sold by other vendors in the geographical area of Miami-Dade, Broward, and Palm Beach Counties and in conjunction with MDAD and the company shall establish the cash price. Should Changes in local market conditions make it desirable to adjust the cash price more frequently than twice a year, the Department will survey the local market data and, if warranted establish an adjusted cash price with the approval of the County.

(C) Although MDAD intends in general to purchase the limestone rock for airport projects at the then-current selling price less any then-applicable discount, MDAD shall have the right for specific airport projects to purchase such rock for itself or through its contractors at the extraction rate plus applicable extraction company fees and sales taxes.

8. REIMBURSEMENT The parties agree that upon approval of this agreement by the Miami-Dade Board of County Commissioners, the County shall, upon providing a copy of the relating invoice and receipt(s), reimburse to FDOT the sum of seventy-four thousand six hundred sixty six dollars ($74,666.00). Such sum was expended by FDOT in order to include OPF-West in a required Supplement Environmental Impact Statement associated with the analysis of rock mining in the Lake Belt region.

9. INSURANCE. The parties shall determine an appropriate level of insurance that shall be required of the extraction/sales company or applicable to the extraction and sales process.

10. Each party agrees to proactively resolve issues arising out of this Agreement in a timely manner. The parties agree that the FDOT Secretary's decision shall be final and binding upon all affected parties, provided such decision is within the requirements of this Agreement.

11. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. Venue shall be in Miami-Dade County.

12. If any part of the Agreement shall be determined to be invalid or unenforceable by a court of competent jurisdiction or by any other legally constituted body having the jurisdiction to make such determination, the remainder of the Agreement shall remain in full force an effect provided that the part of this Agreement thus invalidated or declared unenforceable is not material to the intended operation of this Agreement.

13. This Agreement represents the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. Any

modification, amendment, or alteration in the terms of this Agreement will not be valid unless reduced to writing and duly executed by both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by duly authorized representatives thereof.

MIAMI-DADE COUNTY	FLORIDA DEPT. OF TRANSPORTATION
_____	_____
By:_____	By:_____
ATTEST:	ATTEST:
Harvey Ruvin Clerk	
_____	_____
Deputy Clerk	

CMC INC.
(Construction Material Consultants)

MINING & MINERAL APPRAISAL, BROKERAGE AND CONSULTING

June 29, 2007 CMC Project # S093-01

Andrew H. Magenheimer, MAI
Slack, Johnston & Magenheimer, Inc.
7300 North Kendall Drive, Suite 520
Miami, Florida 33156

Hardcopy to Follow By Mail

RE: EXECUTIVE SUMMARY
OPA-LOCKA WEST AIRPORT
MIAMI-DADE COUNTY, FLORIDA

Dear Mr. Magenheimer:

Per your request, CMC, Inc. (CMC) has prepared the following Executive Summary to our published report on the above referenced property, entitled "*Self Contained Evaluation And Appraisal Report Of Opa-Locka West Airport Limestone Property, Miami-Dade County, Florida, As Of June 1, 2007*", and dated June 29, 2007.

Executive Summary
The Opa-Locka West Airport (Subject Property), under ownership of the Miami-Dade Aviation Department (MDAD), consists of approximately 422.02 acres of land located northwest of downtown Miami, in Miami-Dade County, Florida.

The Subject Property is also located within the "Lake Belt Mining District", which is a large, localized area west of downtown Miami that was originally reserved to be utilized primarily for mineral resource (limestone/limerock) extraction by mining companies, to supply the greater Miami-Dade area by road, and other areas of Florida by rail.

CMC, Inc. (CMC) is a full service mining & mineral appraisal, brokerage and consulting firm, which specializes in construction materials and industrial mineral commodities, properties and operations. Consulting services were requested to determine if the Subject Property had potential as a mineral property, and appraisal services comprising of five (5) appraisal scenarios were requested to help MDAD understand the logistics/options available.

The Subject Property is not permitted for mining, but is located adjacent to a mined out quarry and a mining property immediately to the east. A one (1) year permitting period was presumed under the Aggressive Scenarios, and a two (2) year permitting period assumed under the Conservative Scenarios.

Subsurface site investigations (eight (8) borings to depths of between 75 to 100 feet below ground surface) were installed in April 2007, with field samples being composited and processed to simulate mining of the mineral reserves. Analytical testing confirmed that materials processed from the Subject Property pass major tests for coarse aggregates and base materials, in accordance with Florida Department Of Transportation specifications.

CMC utilized the data collected from the subsurface site investigations to prepare an accurate mineral resource estimate, with approximately 44,627,600 tons of limestone mineral resources available under Scenarios 1,2,4 & 5, and 50,387,900 tons of limestone mineral resources available under Scenario 3.

Field research was conducted to determine royalties and prices currently paid for limestone products (aggregates and base). Market demand analyses were conducted to determine the supply/demand of the limestone products and market shares.

Market analyses indicated that the market share for a new limestone producer would range between approximately one (1) to three (3) million tons per year. CMC's appraisal scenarios restricted sales to a maximum of 2.5 million tons per year under the Aggressive Scenarios, and 2.0 million tons per year under the Conservative Scenarios.

5535 East Angela Drive • Scottsdale, Arizona 85254 • Tel: 480-443-3978
Fax: 480-443-1341 • Website: www.cmcincusa.com • E-Mail: cmc@cmcincusa.com

CMC's appraisal addressed five (5) scenarios, to address all viable options as a mineral/mining (limestone) property, as follows:

1. Appraisal Scenario 1: Mineral Interest Appraisal of the Subject Property, on a Royalty Income Basis, assuming conservative appraisal parameters.

2. Appraisal Scenario 2: Mineral Interest Appraisal of the Subject Property, on a Royalty Income Basis, assuming aggressive appraisal parameters.

3. Appraisal Scenario 3: Mineral Interest Appraisal of the Subject Property, on a Royalty Income Basis, specifically to White Rock Quarries.

4. Appraisal Scenario 4: Mining Interest Appraisal of the Subject Property, on a Mining Income Basis, assuming conservative appraisal parameters.

5. Appraisal Scenario 5: Mining Interest Appraisal of the Subject Property, on a Mining Income Basis, assuming aggressive appraisal parameters.

Net Royalty Income is not discounted to account for risk/time, and is equivalent to the "Cash Flow" that MDAD could receive over time. Net Present Value is discounted to account for risk/time and represents the current Net Present Value of the Mineral Interest, if it were to be sold today.

The results of the Appraisal Scenarios were as follows:

Scenario	Type	Parameters	Discount Rate	Net Present Value (NPV)	Net Cash Flow	Time (Years)	Commencement Of Cash Flow
1	Royalty Income	Conservative	9.00%	$21,702,300	$76,965,200	24	June 1, 2009
2		Agressive	11.25%	$27,806,800	$95,744,500	20	June 1, 2008
3		Special	9.00%	$37,952,800	$113,153,300	21	June 1, 2008
4	Mining Income	Conservative	14.0%	$40,960,000	$246,518,500	24	June 1, 2009
5		Agressive	17.5%	$91,077,400	$473,222,300	19	June 1, 2008

If you have any questions, please feel free to contact me at (480) 443-3978. Thank you.

Sincerely,

J Manes

John J. Manes, P.G.
Executive Vice President
Senior Geologist

Cc: Miguel Southwell, Miami-Dade Aviation Department
Greg Owens, Miami-Dade Aviation Department
Manny Gonzales, Miami-Dade Aviation Department

H:\CMC\PROJECTS\ACTIVE\M-Z\S093-01 (Slack, Johnston & Magenheimer, Opa-Locka Airport, FL)\Report\01 Report Sections\S093-01 - Magenheimer 06-29-07.doc

Attachment 2

Opa-locka West ACOE Permit application

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
4400 PGA BOULEVARD, SUITE 500
PALM BEACH GARDENS, FL 33410

REPLY TO
ATTENTION OF

Palm Beach Gardens
Regulatory Office

FEB 0 5 2008

PUBLIC NOTICE

Permit Application No. SAJ-2007-535(IP-LAO)

TO WHOM IT MAY CONCERN: This district has received several applications for Department of the Army (DA) permits pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344). One of these applications is for a new limerock mine and the others are for an expansion of limerock mining at existing mining locations within the Lake Region in north-west Miami Dade County as described below. The project locations and accompanying drawings encompass a mix of a) lands previously mined, b) previously authorized, but not yet mined, c) expanded or new mining areas. Due to the proximity of the individual companies' activities to each other, the evaluation of each individual request is interrelated to other requests. The U.S. Army Corps of Engineers (Corps) is issuing separate public notices to facilitate the public's ability to review the specific characteristics for each proposed project. However, the Corps evaluation of the projects will require a comprehensive treatment of the factors considered by the Corps in its evaluation. As such, where appropriate, comments submitted under any single public notice that are not site specific to a single mine will be applied to all of the proposed Lake Belt mine expansions.

BACKGROUND: In 2000, the Corps completed a Programmatic Environmental Impact Statement evaluating proposed limerock mining in the multi-party Lake Belt Plan. The Lake Belt Plan was part of a larger initiative involving the State of Florida's action to establish the "Lake Belt" rock mining area several years prior as a way to evaluate large scale lime stone mining in a watershed fashion. Subsequently, in April 2002, the Corps issued essentially identical permits to 10 rock mining companies to excavate limerock from approximately 5,400 acres of mostly melaleuca impacted everglades wetlands west of Miami. The permits were issued for a lesser amount of mining than the amount originally proposed in the overall 50-year Lake Belt Plan. Those permits were challenged in Federal Court (Case No. 03-23427-CIV-HOEVELER, United States District Court Southern

District of Florida) with a Federal District Court decision being delivered in March 2006. That decision found in favor of the Plaintiffs. The Corps committed to conducting a Supplemental Environmental Impact Statement (SEIS) on the mining, as well as reinitiation of consultation on the federally listed wood stork. The U.S. Fish and Wildlife Service provided a Biological Opinion for the wood stork for the 2002 permits in August 2006. On July 13, 2007, the Court's Order Supplementing the Court's Order of March 22, 2006, was issued. This order substituted a plaintiff proposed 60-day setback line for mining within the vicinity of Miami-Dade County's Northwest Wellfield, which is located within Lake Belt, until completion of the SEIS. As such, the Court's Order has affected mining within this expanded setback zone. The Corps has prepared, released, and obtained comments on a Draft Supplemental Environmental Impact Statement (SEIS) dated August 2007. The Final SEIS is still under review and is expected to be released May 2008.

APPLICANT: Miami-Dade County Aviation Department
Pedro Hernandez, P.E.
Manager, Civil & Environmental Engineering
PO Box 025504
Miami, FL 33102-5504

WATERWAY & LOCATION: The geographic boundary of the Miami-Dade County Lake Belt Area is defined by Florida Statute 373.4249 and consists of everglades type wetlands immediately east of Water Conservation 3B and the Everglades National Park and west of the Urban Development Boundary in northwest Miami-Dade County.

The proposed project is specifically located in waters of the United States between NW 132nd Avenue to the east, NW 142nd Avenue to the west, the Dade/Broward County line to the north and 186th Street to the south (Section 2-3, Township 52 South, Range 39 East), within the Lake Belt region in Miami-Dade County, Florida.

Directions to the site are as follows: Exit Florida's Turnpike (Ronald Reagan Turnpike) at Exit 35 for US-27/Okeechobee Road. Keep right at the fork, follow signs for Homestead and merge onto W Okeechobee Road/US-27 S. The mine is at the southeast corner of the intersection of US-27 and the Miami-Dade County at what is currently the Opalocka Airport.

LATITUDE & LONGITUDE: Latitude 25.954° North
Longitude 80.421° West

PURPOSE: To operate limerock mines.

PROPOSED WORK: The applicant proposes to fill and excavate approximately 410 acres of wetlands for limerock mining within the Lake Belt region. Upon completion of the mining activities, there will be a total conversion of the physical substrate within the mining footprint from wetland to deep lakes with 100-foot littoral shelves along the perimeter. In addition to creation of the mining lakes themselves, staging areas, work-pads and haul roads, must be created. Work-pads and haul roads are limerock material placed on the muck or they are exposed limerock. Rock mining is a multi-phase process; at the beginning of mining, the vegetation is removed and the muck is stockpiled on other areas of muck. The rock is then fractured for excavation down to a depth of approximately 80 feet by blasting. The rock is removed by draglines, which temporarily windrow the rock on work-pads. The 100-foot wide limerock shelves along the lake perimeter are converted to littoral shelves after the mining is complete. To improve the viability of the littoral shelf and wetland habitat, muck is placed back on the limerock shelf and the area is allowed to naturally recruit native species.

EXISTING CONDITIONS: The Lake Belt Region itself can be divided into the Pennsuco Wetlands on the west between the L-30 Canal and the Dade-Broward Levee and the area where mining occurs which lies between the Dade-Broward Levee and the Urban Development Boundary. The Lake Belt Region is bounded on the east and south by residential development and is bounded on all sides by canals which separate it from the Everglades. Based on the habitat survey of the area completed as part of the Final Programmatic EIS issued in 2000 and validated in the previously released SEIS, the Lake Belt region varies in habitat quality from wet prairie to dense melaleuca.

The habitat within the 410 acres specifically proposed for mining under this application consists of wet prairie, lakes and mixed wetland hardwoods.

ENDANGERED SPECIES: The Corps has determined the proposed project may affect, but is not likely to adversely affect the threatened eastern indigo snake (*Drymarchon corais*) which does not have any designated critical habitat. The Corps will request Fish and Wildlife's concurrence with this determination pursuant to Section 7 of the Endangered Species Act by separate letter.

The Corps has determined the proposal may affect the endangered wood stork (*Mycteria Americana*), which does not have any designated critical habitat. The Corps will request initiation of formal consultation with the Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act by separate letter.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would impact approximately 410 acres of melaleuca invaded palustrine emergent and forested wetlands utilized by various life stages of penaeid shrimp complex. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the South Atlantic Region. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

IMPACT ON CULTURAL RESOURCES: Presently unknown archeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished. Based on information submitted by the applicant to date, the Corps is unaware of any known archeological, scientific, prehistorical, or historical data that have been identified within the project area. Because the project as proposed may have the potential to adversely affect unknown sites, the Corps will coordinate the proposed action with Federally Recognized Tribes, the State Historical Preservation Office, and the Advisory Council on Historic Preservation by separate letter.

MITIGATION: In 1999, the Florida Legislature established a mitigation fee on each ton of limerock and sand sold from the Miami-Dade County Lake Belt Area. The purpose of this fee is to provide for the mitigation of wetland resources lost to mining activities within this area. The Legislature found that the impact of rock mining could best be offset by the implementation of a comprehensive mitigation plan, as recommended in the 1998 Progress Report to the Florida Legislature by the Miami-Dade County Lake Belt Plan Implementation Committee. Legislation was adopted in s. 373.4149(1), Florida Statutes (F.S.), authorizing the mitigation fee and governing its use. The mitigation fee became effective on October 1, 1999. The fee applies to raw, processed, or manufactured limestone, cement, and concrete products. The mitigation fee is collected by the Florida

Department of Revenue and deposited to a trust fund at the South Florida Water Management District (SFWMD). An interagency committee, referred to as the Lake Belt Mitigation Committee (Committee), must approve expenditures from the trust fund. Additional information on the Miami-Dade County Lake Belt Plan Implementation Committee, including copies of the Plan, Annual Progress Reports and Technical Reports, is available at the web site http://www.sfwmd.gov/org/pld/proj/lakebelt/index.html.

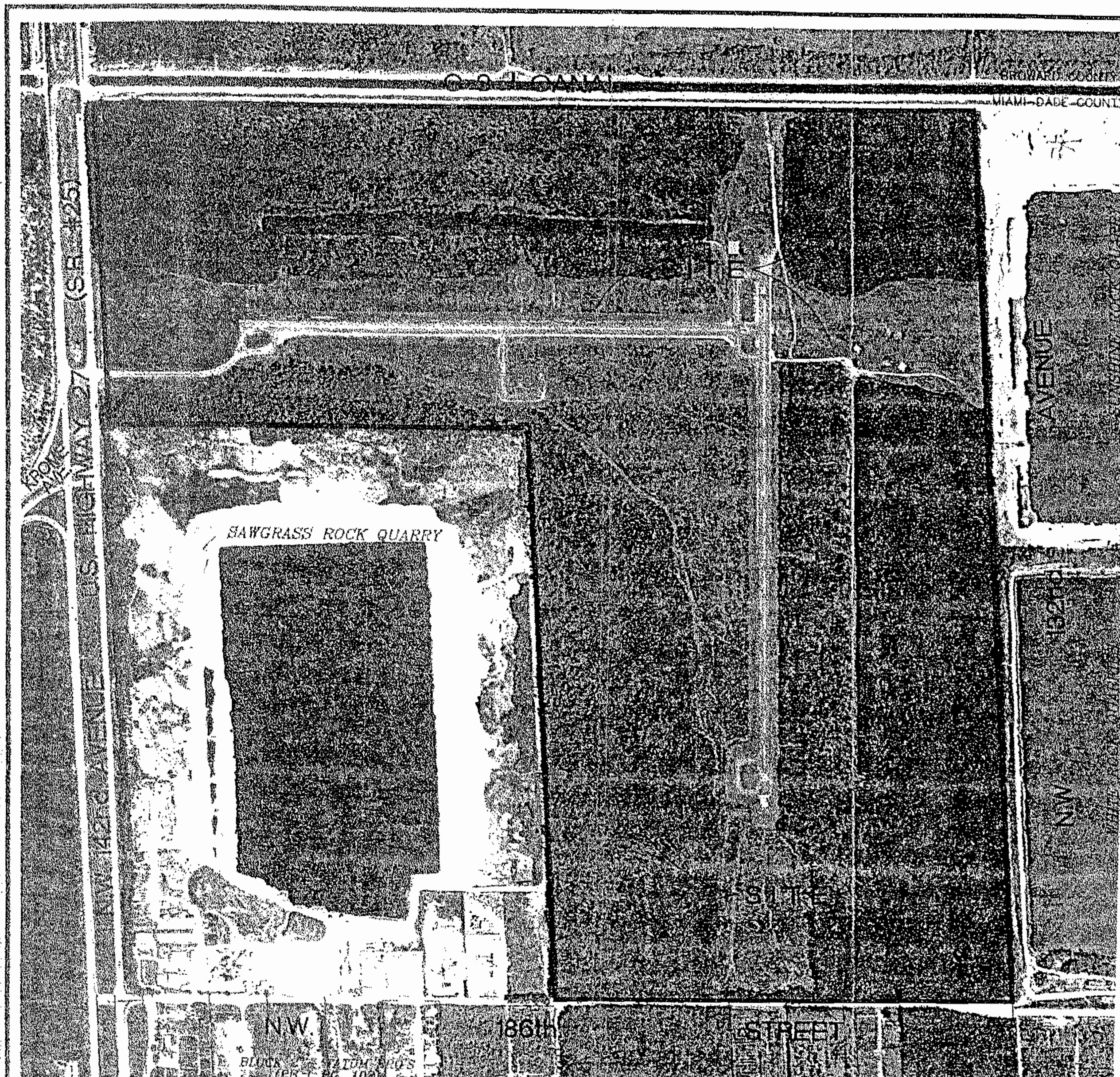
NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified. The jurisdictional line has not been verified by Corps personnel.

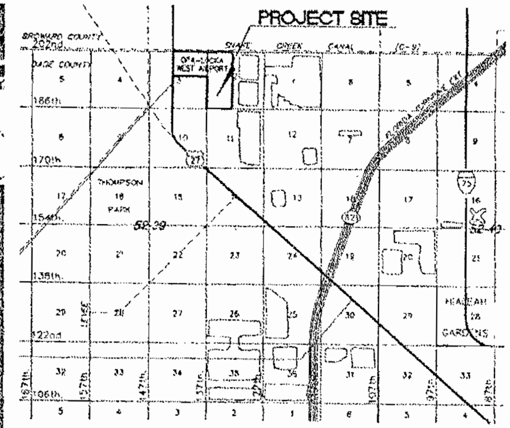
AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification may be required from the Florida Department of Environmental Protection.

COMMENTS: The Corps is soliciting comments from the public, Indian Tribes, Federal, State, and local agencies and officials and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments submitted to the Corps will be considered by the Corps to determine whether to issue, modify, condition or deny a permit. Comments regarding the application should be submitted in writing to the District Engineer at the above address within 30 days from the date of this notice.

If you have any questions concerning this application, you may contact Leah A. Oberlin at the letterhead address, by electronic mail at Leah.A.Oberlin@usace.army.mil, by fax at 561-626-6971, or by telephone at 561-472-3506.

ADDITIONAL INFORMATION: The Corps will consider the information in the SEIS, Final SEIS, comments on those documents, comments on this public notice in the evaluation of the probable impact to the associated wetlands to determine whether to issue, modify, condition or deny permits related to mining activities within the areas described as mining by the enclosed drawing. This will also be based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.





LOCATION SKETCH
SECT. 2 AND 3, TWP. 52s., RNG. 39e.
SCALE: 1"=2 MILES

EXISTING SITE TABULATION

RUNWAY AND DRIVEWAY EMBANKMENTS:	32.03 AC.
OPEN WATER BORROW PITS:	12.17 AC.
CLEAR AREAS:	93.31 AC.
FORESTED, HEAVY MALALEUCA:	276.97 AC.
TOTAL SITE:	414.48 AC.

US Army Corps of Engineers
File # SAJ-2007-535(IP-LAO)
Drawing # 1 of 3

GRAPHIC SCALE
(IN FEET)
1 inch = 600 ft.

DEC - 4 2006

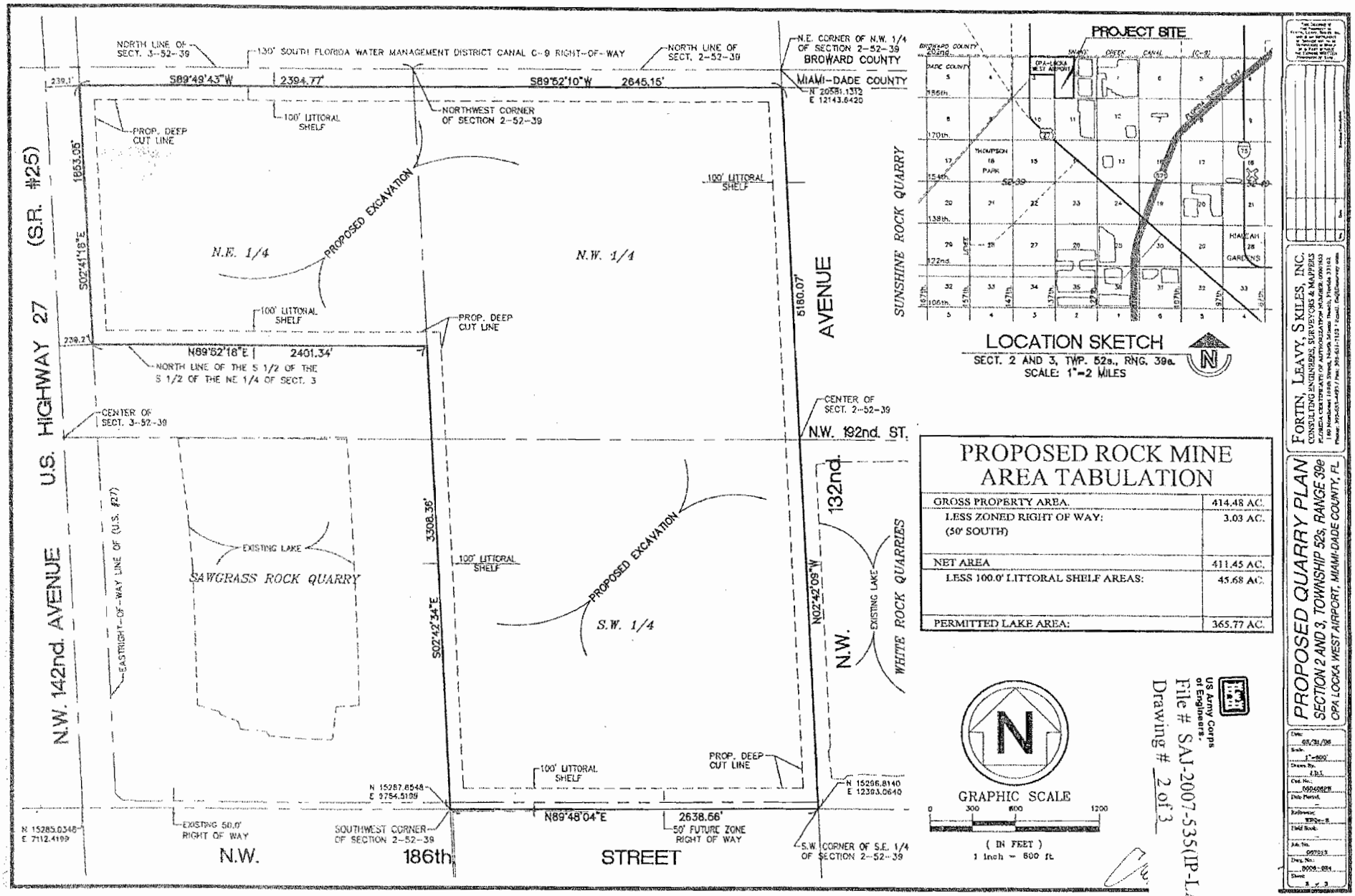
SITE LOCATION

PROPOSED QUARRY
SECTION 2 AND 3, TOWNSHIP 52s, RANGE 39e
OPA LOCKA WEST AIRPORT, MIAMI-DADE COUNTY, FL.

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS

Sheet 1 of 3

45



PROPOSED ROCK MINE AREA TABULATION

GROSS PROPERTY AREA:	414.48 AC.
LESS ZONED RIGHT OF WAY: (50' SOUTH)	3.03 AC.
NET AREA	411.45 AC.
LESS 100.0' LITTORAL SHELF AREAS:	45.68 AC.
PERMITTED LAKE AREA:	365.77 AC.

GRAPHIC SCALE
0 300 600 1200
(IN FEET)
1 inch = 600 ft

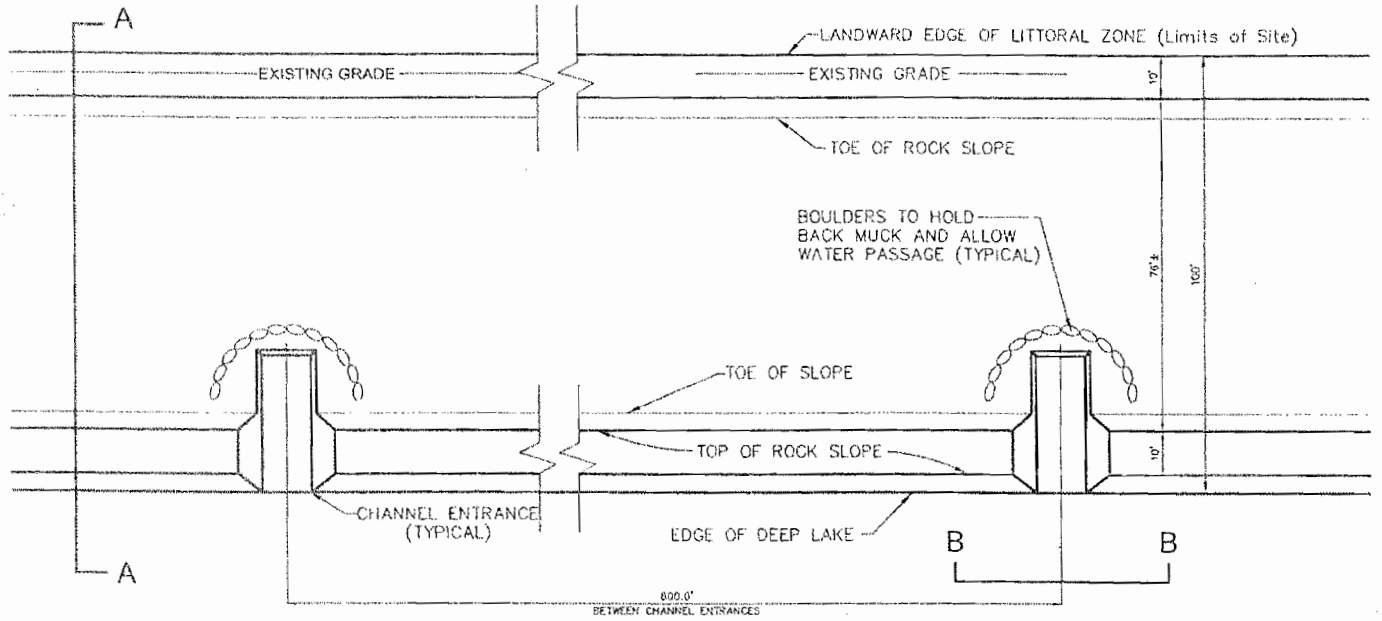
US Army Corps of Engineers.
File # SAJ-2007-535(IP-LAO)
Drawing # 2 of 3

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS

PROPOSED QUARRY PLAN
SECTION 2 AND 3, TOWNSHIP 52s, RANGE 39e
OPA LOCKA WEST AIRPORT, MIAMI-DADE COUNTY, FL.

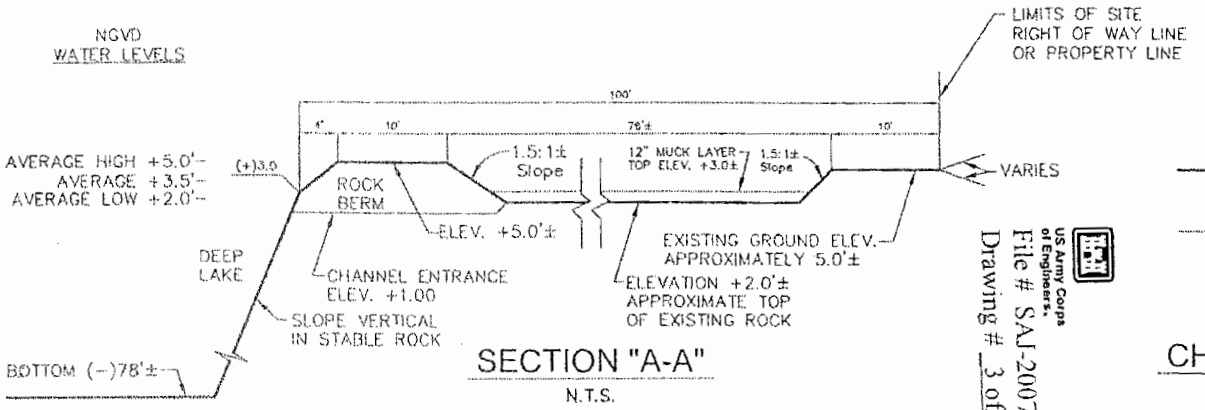
Date: 05/31/06
Scale: 1"=600'
Drawn By: EJL
Ord. No.: 0604DER
Date Plotted:
Reference:
Field Book:
Job No.: 997213
Dwg. No.: 0604-004
Sheet: 2 of 3

9h



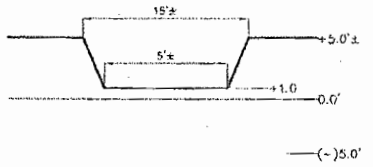
LITTORAL ZONE PLAN

N.T.S.



SECTION "A-A"

N.T.S.



SECTION "B-B" CHANNEL ENTRANCE

N.T.S.

US Army Corps of Engineers.
File # SAJ-2007-535(IP-LAO)
Drawing # 3 of 3

DEC - 4 2006

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER 00078451

PROPOSED PERIMETER SECTION
SECTION 2 AND 3, TOWNSHIP 52s, RANGE 39e
OPA LOCKA WEST AIRPORT, MIAMI-DADE COUNTY, FL.

Date: 05/31/06
Scale: AS SHOWN
Drawn By: T.D.I.
Cad No.: 050439P3
Date Revised:
Reference:
Field Book:
Job No.: 051039
Dwg No.: 3006-004
Sheet: 3 of 3

4 of 4

IMPACT ON NATURAL RESOURCES: Preliminary review of this application indicates that an Environmental Impact Statement will not be required. Coordination with US Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area. By means of this notice, we are soliciting comments on the potential effects of the project on threatened or endangered species or their habitat.

IMPACT ON CULTURAL RESOURCES: Review of the latest published version of the National Register of Historic Places indicates that no registered properties, or properties listed as eligible for inclusion therein, are located at the site of the proposed work. Presently, unknown archaeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine, Protection, Research, and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make or deny this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with approved Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

David S. Hobbie
Regulatory Division

48